EXHIBIT 28

DECLARATION OF ISHWAR K. PURI

I, Ishwar K. Puri, declare as follows:

1. I am the Senior Vice President of Research and Innovation, and Professor of Aerospace and Mechanical Engineering, at the University of Southern California ("USC" or "University") in Los Angeles, California. I have served as USC's head of research since 2021.

2. As USC's Senior Vice President of Research and Innovation, I have personal knowledge of the contents of this declaration, or have knowledge of the matters based on my review of information and records gathered by USC personnel, and could testify thereto.

3. USC receives substantial annual funding from the National Institutes of Health ("NIH"). In FY24, USC received over 1,868 NIH awards, totaling $456.5M, of which $233.9M was for direct costs, $96.7M for subcontracts (which are not eligible for overhead recovery), and $125.8M for indirect costs.

4. The funding USC receives from NIH supports critical and cutting-edge medical research, which millions of Americans benefit from and depend on. For example:

   a. **Aging and Alzheimer's disease**: The funding that USC receives from the National Institutes of Aging supports multiple USC research centers dedicated to aging and Alzheimer's disease, including the USC Alzheimer's Disease Research Center, the USC/UCLA Center on Biodemography and Population Health, and the Alzheimer's Clinical Trials Consortium, amongst others. These research centers drive groundbreaking discoveries in neurodegeneration, prevention, and treatment, and are critical to the health of the American people as they help address the growing public health (and national economic) challenge of Alzheimer's and age-related diseases, improving early diagnosis,

developing innovative therapies, and shaping policies for better care and support.

b. **Cancer**: Funding that USC receives from the National Cancer Institute supports the USC Norris Comprehensive Cancer Center, which conducts groundbreaking research on cancer prevention, treatment, and survivorship while providing cutting-edge clinical care. USC's research in this area advances precision medicine, innovative therapies, and community outreach programs, ultimately improving cancer outcomes and improving the lives of the American people. Funding for cancer has also been pivotal in understanding biological mechanisms necessary for the pharmaceutical industry to generate curative therapy.

c. **Translational Research**: USC is home to the National Center for Advancing Translational Sciences-funded Southern California Clinical and Translational Science Institute, which accelerates the translation of scientific discoveries into real-world health solutions by supporting interdisciplinary research, clinical trials, and community engagement. This critical work accelerates the development of new treatments, medical technologies, and public health interventions from laboratory discoveries to real-world applications, bridging the gap between research and patient care and improving disease prevention and treatment amongst the American population.

d. **Neuroscience**: USC is a key contributor to the NIH-funded Brain Research Through Advancing Innovative Neurotechnologies (BRAIN) Initiative and is home to the National Institute of Neurological Disorders and Stroke-funded

Zilkha Neurogenetic Institute and the Stroke Preclinical Assessment Network Coordinating Center. This work is critical to the health and lives of the American people as it advances the understanding, prevention, and treatment of neurological disorders such as stroke, Parkinson's disease, and Alzheimer's, with the goal of enhancing quality of life, and reducing the burden of neurological diseases nationwide.

e. **Blindness:** NIH-funded research at USC has supported the use of a variety of state-of-the-art techniques, including gene therapy, electric currents, and other novel approaches best discovered at universities, to prevent and possibly reverse blindness of acute macular degeneration and other diseases leading to loss of vision.

5. Indirect costs are essential for supporting this research. The NIH's proposal to cut indirect cost rates to 15% would seriously jeopardize all of the research projects described in paragraph 4.

6. Indirect costs support an extensive, comprehensive suite of equipment and facilities at USC that is relied upon by the institution's researchers to remain at the forefront of medical discovery. These advanced core and shared research facilities include the following resources (further description provided in paragraph **7.a.i.**): 4D Quantitative Imaging, Aging Biomarker and Service Core, Bioreagent and Cell Culture Core, Biostatistics Core CHLA, Biostatistics Core NCCC, Biostatistics Core SC CTSI, Cell and Tissue Imaging Core, Cellular Imaging Core, Center for Quantum Information Science & Technology, Chang Stem Cell Engineering Facility, Chemistry Instrumentation, Circulating Tumor Cells Research Core, Citavi, Clinical Research, Clinical Trials Unit, Cognitive Neuroimaging Center, Core Center of Excellence in Nano Imaging,

Data Science Core, Department of Animal Resources, Diabetes and Obesity Research Institute Clinical Services Core, Diabetes and Obesity Research Institute Metaboli, Assay Core, Dimensions, Flow Cytometry Core Facility, Functional Biological Imaging Core, Gene Targeting & Pathology Core, Good Manufacturing Practice Core, GrantForward, High Performance Computing Center, Histology Laboratory, Image Processing and Informatics Lab, Immune Monitoring Core, Information Technology Services, Integrative Liver Cell Core, John O'Brian Nanofabrication Laboratory, Lentiviral Core Laboratory, Machine Shop Facilities, Molecular Genomics / DNA Oligo Synthesis, Mass Spectrometry Core, Molecular and Cell Biology Support Core, Molecular Genomics / DNA Sequencing, Molecular Genomics / Genomics and Arrays, Molecular Genomics/Microarray, Molecular Imaging Center – Small Animal Imaging, MOSIS Very Large Scale Integration Circuit Fabrication, Multi-Photon Microscopy Core, Nanobiophysics Core, NCCC Bioinformatics Core, Neuroplasticity and Imaging, Norris Library Bioinformatics Support, NubiS, Optical Imaging Facility, Philanthropy News Digest, Proteomics Core, Research Imaging Core at the Saban Research Institute, SC CTSI-Southern California Clinical and Translational Science Institute, Schaeffer Center Data Core, Seahorse Core Facility Gerontology, Shoah Foundation, Spatial Sciences Institute, Structural Biology Center, Transgenic/ Knockout Rodent Core Facility, Translational Imaging Center, Translational Pathology Facility – Adult Tissue Arm, Translational Pathology Facility – Slides & Soft Tissue, Translational Research Laboratory, Understanding America Study, USC Center of Excellence for Molecular Characterization, USC Digital Repository, USC Genome Core, USC Libraries Bioinformatics Support, Vector Core, Video Tracking Core, X-Ray Crystallography Facility. These facilities and equipment are vitally needed to support our research in these areas.

7. For example, with respect to the areas of research described in Paragraph 4:

a. **Aging and Alzheimer's disease** research requires state-of-the-art facilities and equipment, such as advanced neuroimaging, biomarker analysis labs, and high-performance computing for big data analysis. USC operates and maintains **state-of-the-art research facilities** that support Alzheimer's disease research, including the **USC Alzheimer's Therapeutic Research Institute**, which leads clinical trials, the **Mark and Mary Stevens Neuroimaging and Informatics Institute**, which pioneers advanced brain imaging and data science, and the **USC Michelson Center for Convergent Bioscience**, which fosters interdisciplinary collaborations to accelerate breakthroughs in neurodegenerative disease treatment.

i. In addition to these significant facilities, USC provides researchers with access to advanced core and shared research facilities, including state-of-the-art imaging equipment, biostatistics support, a vivarium supporting animal studies, powerful computing centers, and cutting-edge genomics and proteomics technology. These facilities include: **4D Quantitative Imaging Lab** - provides state-of-the-art digital image processing and quantitation; **Aging Biomarker and Service Core** - QuickPlex SQ 120 (Meso Scale Discovery, MSD) and SpectraMax M3 multi-mode microplate readers (Molecular Device); **Bioreagent and Cell Culture Core -** supports cancer-related research that requires in vitro experiments, provides reagents for cell culture, and prepares bioreagents that are produced by cells grown in the Core; **Biostatistics**

Core CHLA – assists researchers with the design and analysis of clinical and laboratory studies, including formulation of research questions, IRB and grant applications, sample size and power estimation, data management and forms development, statistical analysis, manuscript preparation and publication; **Biostatistics Core NCCC** – provides statistical support to clinical and basic science cancer-related research, working with members of the Clinical Investigations Support Office on in-house clinical trials; **Biostatistics Core SC CTSI -** provides high quality, easy-to-access biostatistics service and guidance to investigator-initiated clinical studies and trials from concept to close-out; **Cell and Tissue Imaging Core -** provides tissue processing, thin sectioning, embedding, cryosectioning, immunostaining, paraffin embedding, digital photomicroscopy, digital slide scanning, SEM imaging, and TEM imaging and computer aided graphics; **Cellular Imaging Core** - houses light microscopy and digital image processing equipment to support cell biology research; **Center for Quantum Information Science & Technology –** provides mentorship for graduate and postdoctoral research, sponsors a robust visiting scholars program, develops and teaches novel QIST-based courses, organizes international conferences and workshops, and hosts regular seminar series; **Chang Stem Cell Engineering Facility -** genetically modifies embryonic stem (ES) cells and induced pluripotent stem (iPS) cell lines; **Chemistry Instrumentation Facility** – provides

proteomics and spectroscopy; **Choi Family Therapeutic Screening Facility** - enables investigators from USC and beyond to improve their understanding of diseases and accelerate the discovery of potential therapeutic drugs; **Circulating Tumor Cells Research Core -** employs a variety of technologies that enrich CTCs for enumeration or molecular characterization; **Citavi** - reference management and note-taking software; **Clinical Research Informatics -** provides services enabling complete access and analysis of patient data from the electronic medical records of Keck Medicine of USC, Children's Hospital of Los Angeles, and the Los Angeles Department of Health Services; **Clinical Trials Unit -** offers a broad range of services for investigators to conduct study visits ranging low complexity to high complexity; **Cognitive Neuroimaging Center -** pursues structural and functional brain imaging studies using state of the art techniques, to contribute to the development of future brain imaging modalities and to disseminate knowledge about the brain, the mind, and neuroimaging; **Core Center of Excellence in Nano Imaging -** provides research tools for imaging, visualization, and analysis of nano-scale features and structures, both man-made and natural, including biological structures; **Data Science Core** - develops and supports databases for laboratory data management, multi-center clinical trials coordination, epidemiologic and prevention studies, as well as disease specific studies; **Department of Animal Resources -** assist faculty in preparing proposals and

carrying out animal-based research and teaching activities at USC; **Diabetes and Obesity Research Institute Clinical Services Core -** provides expert obesity- and diabetes-related clinical services to researchers; **Diabetes and Obesity Research Institute Metabolic Assay Core -** provides assay services to investigators; **Dimensions -** a tool licensed by USC to find and compare research grants, patents, clinical trials, publications, and other metrics by individual, specialty, or university; **Flow Cytometry Core Facility -** provides the research community with the technology to selectively phenotype and sort specific populations of cells; **Functional Biological Imaging Core -** pre-clinical imaging resource at the Zilkha Neurogenetic Institute takes advantage of state-of-the-art preclinical MRI/PET instrumentation; **Gene Targeting & Pathology Core** - provides genetically manipulated mice for biomedical studies; **Good Manufacturing Practice Core** – provides the manufacture of therapeutic grade cell-based products under GMP conditions for use in clinical trials; **GrantForward -** search engine dedicated to helping institutions and individuals find grant opportunities; **High Performance Computing Center -** comprises a diverse mix of computing and data resources, including two Linux clusters (the principal computing resource) as well as a central facility that provides more than 1.4 petabytes of combined disk storage and potential access to nearly a petabyte of tape storage; **Histology Laboratory -** supports all steps to make microscope slides from tissue

samples, processing and embedding, paraffin sectioning, frozen sectioning, H&E staining, and Microm HM310 rotary microtome usage; **Image Processing and Informatics Lab -** utilizes Biomedical Imaging and Informatics Technologies to train and educate scientists and physicians in clinical R&D services related to medical imaging and informatics; **Immune Monitoring Core -** offers advice, technical support and equipment for all immune monitoring needs; **Information Technology Services -** provides information technology and support services to USC researchers; **Integrative Liver Cell Core** - supports center investigators and serves as a national resource by providing critical animal core services and animal models; **John O'Brian Nanofabrication Laboratory** - central user, Class 1000 cleanroom dedicated to supporting the nanofabrication research efforts of USC researchers; **Lentiviral Core Laboratory -** provides services for production of small-scale lentiviral stocks for delivery and expression of transgenes or shRNA of interest; **Machine Shop Facilities -** provides machine work for research in the Viterbi School of Engineering and in the Dornsife College of Letters, Arts and Sciences; **Molecular Genomics / DNA Oligo Synthesis;** provides Oligo DNA Services; **Mass Spectrometry Core -** equipped with state-of-the-art instruments for imaging mass spectrometry (IMS), high-throughput screening, and quantitative metabolomic and proteomics; **Molecular and Cell Biology Support Core -** provides support services to faculty and laboratories at

the Ezralow Tower, the Norris Topping Tower, the Harlyne Norris Research Tower, and the Smith Tower at CHLA; **Molecular Genomics / DNA Sequencing -** : Capillary DNA sequencing; **Molecular Genomics / Genomics and Arrays -** performs high throughput analyses of genetic (polymorphism/mutation) and epigenetic variations (DNA methylation) that underlie predisposition and progression to cancer; **Molecular Genomics/Microarray -** gene expression profiling with a variety of arrays, including human, mouse and rat; mutation analyses (p53); HIV, yeast, and bacterial genome analyses; and SNP analyses; **Molecular Imaging Center – Small Animal Imaging -** focuses on the translational needs of investigators to allow in vivo imaging of disease processes and development of new molecular therapeutics and diagnostics, providing support to research studies of small animals for a variety of applications; **MOSIS Very Large Scale Integration Circuit Fabrication -** provides customers with technologies and manufacturing solutions that span all parts of the production cycle, from small to large-quantity fabrication runs, to packaging and assembly; **Multi-Photon Microscopy Core -** provides in vivo imaging of intact organs in small animals with high temporal and subcellular resolution, ideal for studying (patho)physiological processes in health and disease; **Nanobiophysics Core -** supports faculty and students across the university in the study of molecular nano-assembly, structures and functions; **NCCC Bioinformatics Core**

- offers a range of services to researchers across Norris Cancer Center at USC and other academic institutions on a fee-based or combination of fee- and collaboration-based service; **Neuroplasticity and Imaging** - uses Transcranial Magnetic Stimulation (TMS) to investigate brain-behavior relationships during motor skill learning and motor control in non-disabled and brain-injured individuals; **Norris Library Bioinformatics Support** - Norris Library provides bioinformatics support to Norris Library; **NubiS** - complete data collection tool including all traditional modes of data collection like self-administered, face-to-face, and telephone interviewing; **Optical Imaging Facility** - specializes in cellular and subcellular fixed or dynamic imaging and analysis of biological material; **Philanthropy News Digest** - publishes requests for proposals and notices of awards as a free service for U.S.-based nonprofit and grantmaking organizations; **Proteomics Core** - utilizes proteomics with advanced mass spectrometry to investigate protein functions and roles in disease; **Research Imaging Core at the Saban Research Institute** – full service in vivo imaging laboratory providing non-invasive capabilities for use on mammalian models; **SC CTSI-Southern California Clinical and Translational Science Institute** - multifaceted resource for clinical and community-partnered translational research; **Schaeffer Center Data Core** - comprehensive data library, analytic computing environments, data and programming expertise, and protected data management; **Seahorse Core Facility**

Gerontology - unique instrument that measure extracellular O2, pH, glucose and lactate fluxes to provide estimates of glucose utilization in cultured cells; **Shoah Foundation -** digital Archive and media resources; **Spatial Sciences Institute -** analyze, model, and visualize location-based data; **Structural Biology Center - s**pecially designed to conduct material, and reduced-, large- and full-scale structural testing; **Transgenic/ Knockout Rodent Core Facility -** provides high-quality embryo and stem cell manipulation, microinjection; **Translational Imaging Center -** brings together advanced light and fluorescence microscopy systems, providing facilities and instruments for scientists engaged in translational research; **Translational Pathology Facility – Adult Tissue Arm -** provides a single point of access for tissue procurement and banking services; **Translational Pathology Facility – Slides & Soft Tissue -** provides normal and tumor tissue specimens for laboratory-based, epidemiologic and clinical studies; **Translational Research Laboratory -** provides USC researchers with access to lab resources and technical guidance to promote translational research; **Understanding America Study -** panel of households of approximately 9,400 respondents representing the entire United States; **USC Center of Excellence for Molecular Characterization -** provides information on the number and type of chemical entities in molecules; **USC Digital Repository -** provides fee-based consulting and services to help USC researchers meet grant data management plan requirements; **USC**

Genome Core - offers NextGeneration Sequencing services to all USC researchers; **USC Libraries Bioinformatics Support -** Statistical analysis of high-throughput data and DNA/protein sequence analysis, comprehensive functional analysis and advanced literature and data search and mining, as well as workshops and training of available software tools; **Vector Core -** provides researchers with state-of-the-art technology, facilities, support staff, and services and a broad range of resources; **Video Tracking Core -** facility provides specialized research video services to USC and non-USC researchers; and **X-Ray Crystallography Facility -** structurally characterizes single-crystal samples of organic, inorganic, and organometallic compounds using X-ray diffraction.

b. **Cancer**: USC cancer research is facilitated by the National Cancer Institute-funded **USC Norris Comprehensive Cancer Center**, a state-of-the-art research and treatment facility designed to support cutting-edge cancer care. Additionally, USC cancer researchers have access to all USC core facilities, as enumerated above in paragraph **7.a.i.**

c. **Translational Research**: USC translational research is facilitated by the NIH-funded **USC Clinical and Translational Science Institute,** which operates within a modern research and clinical facility designed to accelerate medical discoveries into real-world treatments. The building features state-of-the-art clinical research spaces, advanced laboratory facilities, and collaborative

workspaces. Additionally, USC researchers have access to all USC core facilities, as enumerated above in paragraph **7.a.i.**

d. **Neuroscience**: **USC Zilkha Neurogenetic Institute** is a cutting-edge research facility designed to advance the understanding of neurological and psychiatric disorders. Building features include high-tech research laboratories, advanced imaging and microscopy facilities, and a specialized vivarium. **USC's Mark and Mary Stevens Neuroimaging and Informatics Institute** is a high-tech facility dedicated to brain imaging and computational neuroscience, and features advanced neuroimaging suites, high-performance computer center, specialized research laboratories, and secure data infrastructure. Additionally, USC neuroscience researchers have access to all USC core facilities, as enumerated above in paragraph **7.a.i.**

8. Physical space costs are one of the largest components of indirect costs, and the amount of space available to researchers has a direct and obvious impact on the amount of research that can be done at USC. Without sufficient funding, we would have to consider closing research facilities or operating them at reduced schedules.

9. In addition, indirect costs fund the administration of awards, including staff who ensure compliance with a vast number of regulatory mandates from agencies such as NIH.[1] These mandates serve many important functions, including protecting human and animal subjects involved in research; ensuring research integrity; properly managing and disposing of chemical and biological agents used in research; preventing financial conflicts of interest; managing funds; preventing intellectual property, technologies, or national security expertise from being

[1] https://grants.nih.gov/grants/policy/nihgps/nihgps.pdf

inappropriately accessed by foreign adversaries; and providing the high level of cybersecurity, data storage, and computing environments mandated for regulated data.

10. Recovery of USC's indirect costs is based on predetermined rates that have been contractually negotiated with the federal government.

11. The impact of a reduction in the indirect cost rate would be devastating. Of the $456.5M in NIH funding that USC received in FY24, approximately $233.9M was allocated for direct costs, $96.7M for subcontracts (which are not eligible for overhead recovery), and $125.8M for indirect costs. Similarly, in fiscal year 2025, USC expects to receive $319M in NIH funding for direct costs, while $121M is allocated for indirect costs. And over the next five years, USC anticipates receiving an average of $312M from the NIH for annual direct costs. Based on USC's predetermined indirect cost rate, which was agreed upon by the federal government as of May 29, 2024, the University thus expects to receive approximately $121M in indirect cost recovery on an annual basis.

12. If—contrary to what USC has negotiated with the federal government—the indirect cost rate is reduced to 15%, that would reduce the University's anticipated annual indirect cost recovery by $93.7M, to $32.0M.

13. This reduction would have deeply damaging effects on USC's ability to conduct research from day one. Most critically, it would necessarily and immediately result in staffing reductions across the board. Likely examples include:

a. Elimination of approximately 47 administrative staff, operational staff, and leadership positions related to research across 23 USC schools and academic units. The elimination of key research administrative staff would severely disrupt the efficiency and effectiveness of research operations at a university,

hindering grant management, regulatory compliance, and overall project coordination, ultimately slowing down research progress and impact.

b. Elimination of 8 staff members from the university's technology transfer unit. This would severely hinder the commercialization of research innovations, delaying the translation of discoveries into real-world applications and hindering the university's contribution to economic development and national progress through the creation of new technologies and industries.

c. Elimination of 6 staff members from the Institutional Animal Care and Use Committee, potentially halting critical scientific studies and impairing the university's ability to contribute to advancements in medicine and public health on a national scale.

d. Elimination of 8 staff members from USC's Human Research Protection Program, which would compromise the integrity and safety of human subjects in research, potentially halting vital clinical trials and undermining the university's ability to drive medical breakthroughs that benefit public health and contribute to national advancements in science.

e. Elimination of 4 staff members from USC's Department of Animal Resources, which has the potential to disrupt the care and management of research animals, compromising the quality and ethical standards of animal-based research and ultimately hindering the university's ability to contribute to scientific advancements in fields like medicine and biotechnology that have national and global impact.

14. USC anticipates the following immediate consequences of cutting the indirect cost rate to 15%:

a. **Stopping/curbing clinical trials**: A cut to F&A reimbursement would be devastating for the patients served by the National Cancer Institute-funded Norris Comprehensive Cancer Center. As many as 150 adults and children receive treatment through lifesaving NIH-funded clinical trials. In addition to reducing or eliminating access to novel experimental therapies and new combination therapies for people with cancer, the proposed change in F&A policy would stifle development of revolutionary immunotherapies and other desperately needed cancer treatments. Furthermore, impactful current federally funded clinical trials include work on increasing the uptake of effective colon cancer screening (colon cancer is a leading cancer that cost $24.3 billion in medical spending in 2020, accounting for 11.6% of all cancer treatment costs, and screening is highly effective).

b. **Closing critical research programs**: A cut to the indirect cost rate would result in the cessation of several of USC's critical biomedical efforts, including: (1) USC's cell and gene-based therapy programs that are focused on pediatric cancers, hereditary diseases such as sickle cell anemia, restoring heart function in heart failure, and new treatments for crippling arthritis; (2) USC's Alzheimer's Disease Research Center (one of the longest-existing such centers in the U.S.), which supports clinical trials of new therapies aimed at slowing the progression and even preventing Alzheimer's Disease (in 2024, care costs for Americans living with Alzheimer's and other dementias were projected to

reach $360 billion, i.e., over 1% of U.S. GDP); (3) USC's Diabetes and Obesity Research Institute which rapidly translates research findings to diabetes prevention and large patient education programs; (4) USC's Addiction Science Institute, which convenes teams of researchers across pharmaceutical sciences, psychiatry, and public health to curb drug and tobacco addiction in adolescents and adults, including ground-breaking work showing substantial harms in children from vaping; and (4) USC Mark and Mary Stevens Institute for Neuroimaging and Informatics, which houses the world's largest brain imaging research repository in Alzheimer's and related diseases (e.g., Parkinson's) to support the critical work of numerous researchers at other institutions.

c. **Reduction in biomedical research workforce:** In response to the rate reduction, USC would be forced to lay off approximately 20% of trained faculty and staff and implement drastic cuts (50%+) in research training programs that produce the next generation of trained scientists and specialized technologists. Furthermore, leading researchers may seek stable research environments in Canada, UK, and Germany, among other countries.

d. **Canceled Research Symposia:** USC invests in annual symposia that gather national/global experts convening on Alzheimer's disease, diabetes, artificial intelligence, prostate cancer, addiction, and many other issues. All planned symposia would be canceled.

15. USC has for decades relied on the payment of indirect costs. And until now, we have been able to rely on the well-established process for negotiating indirect cost rates with the government to inform our budgeting and planning. Operating budgets rely on an estimate of both

direct and indirect sponsored funding to plan for annual staffing needs (*e.g.*, post-docs, PhD students, and other research staff), infrastructure support (*e.g.*, IT networks, regulatory compliance, and grant management support), and facility and equipment purchases. And in some cases, USC has long-term obligations—for example, faculty salaries and admitted PhD students—and it relies on budgeted grant funding, including associated indirect cost recovery, to fulfill these commitments.

16. In addition to the immediate impacts and reliance interests described above, there are longer term impacts that are both cumulative and cascading. Anticipated cascading effects of cutting overhead include:

a. **Supply chain**: Decreases and/or delays in research will impact many industries that supply reagents and equipment that support research.

b. **Undermining the research safety and compliance infrastructure**: Loss of staff, expertise, and state-of-the-art tracking systems to monitor and support research programs and clinical trials.

c. **Closure/shrinking of medical schools and research institutes**: Depleted resources for research accelerating technologies (e.g. highly sensitive microscopes, scanners) will rapidly lead to shrinking and/or closures of medical schools and research institutes, with large economic impacts and worsening of the national shortage of physicians and other healthcare providers.

17. Disruptions to USC's research will also have negative effects in the Los Angeles area, the state of California, and the broader region. Approximately 19,000 California residents (not including student workers) are directly employed by USC—and it collaborates with state and local partners to help solve regional challenges through joint research and innovation. USC's

research also fuels spending in the regional economy, including by driving discoveries that launch new ventures, attract private investment, and make a positive social impact. A massive reduction in USC's research budget would immediately and seriously jeopardize these contributions to the local region.

18. Finally, slowdowns or halts in research by USC and other American universities will allow competitor nations that are maintaining their investments in research to surpass the United States on this front, threatening both our Nation's national security and its economic dominance. Anticipated broader impacts to the nation include:

a. **Loss of US pre-eminence:** US will lose pre-eminence in life-saving research and innovation, with China and India likely to step into the void

b. **National Security Risk:** Research in areas such as infectious diseases, public health, cancer therapies, computing, and artificial intelligence are all critical to mitigating the risk of pandemics, bioterrorism, and the economic burden of debilitating chronic disease.

c. **Major Hit to National Economy**: Discoveries arising from NIH-funded research provide a foundation for the U.S. biomedical industry, which contributes over $69 billion to the U.S. GDP each year and supports over 7 million jobs. A $1.00 increase in publicly funded basic research stimulates an additional $8.38 of industry research and development investment after 8 years. Furthermore, a $1.00 increase in publicly funded clinical research stimulates an additional $2.35 of industry research and development investment after 3 years.

19. Nor can USC cover the funding gap itself. While USC maintains an endowment, it is neither feasible nor sustainable for USC to use endowment funds or other revenue sources to offset shortfalls in indirect cost recovery, for several reasons:

a. The majority of USC's endowment—around 74%—is restricted to specific donor-designated purposes, such as scholarships, faculty chairs, and academic programs. USC is not legally permitted to use those funds to cover research infrastructure costs.

b. Even the portion of the endowment that is unrestricted is subject to a carefully managed annual payout, typically around 5%, to ensure long-term financial stability for the institution.

c. As a non-profit institution, USC reinvests nearly all of its revenue into mission-critical activities, leaving little margin to absorb unexpected funding gaps. In other words, unlike for-profit organizations, USC does not generate significant surpluses that could be redirected without impacting core academic priorities such as educational programs and financial aid support for students.

19. Moreover, absorbing the cost of a lower indirect cost rate, even if it were possible, would create long-term budget pressures on USC—which would in turn force reductions in key investments supporting USC's faculty, students, staff, research, and teaching infrastructure, as well as other critical activities needed to maintain USC's academic excellence.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 10, 2025, at Los Angeles, California.

/s/Ishwar Puri
Ishwar K. Puri
Senior Vice President of Research and Innovation

University of Southern California